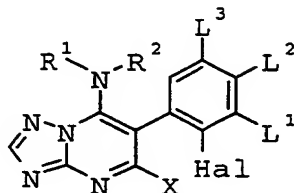


Claims:

1. Substituted 6-(2-halogenphenyl)-triazolopyrimidines of formula I



I

in which

R^1 denote C_1 - C_{10} -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, or C_4 - C_{10} -alkadienyl, C_1 - C_{10} -haloalkyl, C_2 - C_{10} -haloalkenyl, C_3 - C_{10} -cycloalkyl, phenyl, naphthyl, or

a 5- or 6-membered saturated, unsaturated, or aromatic heterocycle, containing one to four nitrogen atoms or one to three nitrogen atoms and one sulfur or oxygen atom,

wherein R^1 and R^2 radicals may be unsubstituted or partly or fully halogenated or may carry one to three groups R^a ,

R^a is cyano, nitro, hydroxyl, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkylthio, C_1 - C_6 -alkylamino, di- C_1 - C_6 -alkylamino, C_2 - C_6 -alkenyl, C_2 - C_6 -alkenyloxy, C_2 - C_6 -alkynyl, C_3 - C_6 -alkynyloxy, or C_1 - C_4 -alkylenedioxy; or

R^2 denote hydrogen, or a group mentioned for R^1 ; or

R^1 and R^2 together with the interjacent nitrogen atom represent a saturated or partially unsaturated 5- or 6-membered heterocycle, containing one to four nitrogen atoms or one to three nitrogen atoms and one sulfur or oxygen atom, which ring may be substituted by one to three R^a radicals;

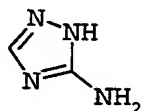
Hal is halogen;

L^1, L^3 independently denote hydrogen, halogen, or C_1 - C_4 -alkyl;

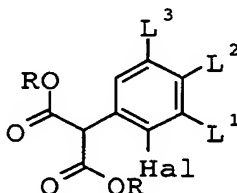
- L^2 is hydrogen, halogen, C_1 - C_4 -haloalkyl, or NH_2 , NHR^b , or $N(R^b)_2$,
- R^b is C_1 - C_8 -alkyl, C_3 - C_{10} -alkenyl, C_3 - C_{10} -alkynyl, C_1 - C_6 -haloalkyl, C_3 - C_6 -haloalkenyl, C_3 - C_6 -haloalkynyl, C_1 - C_8 -alkoxy- C_1 - C_8 -alkyl, C_1 - C_8 -alkylthio- C_1 - C_8 -alkyl, C_3 - C_{10} -cycloalkyl, or $C(=O)$ -A, in which
- A is hydrogen, hydroxy, C_1 - C_8 -alkyl, C_1 - C_8 -alkoxy, C_1 - C_6 -halogenalkoxy, C_1 - C_8 -alkylamino or di- $(C_1$ - C_8 -alkyl)amino;
- wherein at least one from L^1 , L^2 , and L^3 is not hydrogen;
- X is halogen, cyano, C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -haloalkoxy or C_3 - C_8 -alkenyloxy.
2. Compounds of formula I according to claim 1, in which
- R^1 is straight chained or branched C_2 - C_6 -alkenyl, C_1 - C_6 -alkyl, or C_1 - C_{10} -haloalkyl, and
- R^2 is hydrogen or C_1 - C_6 -alkyl, or
- R^1 and R^2 together with the interjacent nitrogen atom represent a heterocyclic ring with 5 or 6 carbon atoms being optionally substituted with one or two C_1 - C_4 -alkyl groups.
3. Compounds according to any one of claims 1 or 2 in which R^1 and R^2 together with the interjacent nitrogen atom represent a 5- or 6-membered heterocyclic ring being optionally substituted with one or two methyl groups.
4. Compounds a formula I to any one of claims 1 to 3 in which X is halogen.
5. Compounds a formula I according to claims 1 to 4 in which thew 6-(2-halogenphenyl)group represents one of the following moieties:
- 2,3,5-trifluorophenyl, 2,4-difluorophenyl, 2-F,4- CF_3 -phenyl, 2-F,5- CH_3 -phenyl, 2-Cl,4-F-phenyl, 2-F,4-Cl-phenyl, 2-F,4-Br-phenyl, 2-Cl,4-Br-phenyl, 2,3-difluorophenyl, 2,4-difluorophenyl, 2,4,5-trifluorophenyl, 2,3,4-trifluorophenyl,

2-F,4-NHC(O)CH₃-phenyl, 2-Br,3,5-difluorophenyl,
2-F,4-NO₂-phenyl, and 2-Cl,4-NO₂-phenyl.

6. A process for the preparation of compounds of formula I as
defined in claims 4 and 5 which comprises reacting
5-amino-1,2,4-triazole

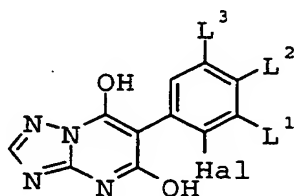


with 2-phenyl-substituted malonic acid ester of formula II,



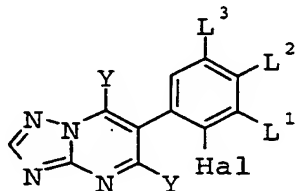
II

wherein Hal, L¹, L², and L³ are as defined in formula I, and R
denotes C₁-C₆-alkyl, under alkaline conditions, to yield com-
pounds of formula III,



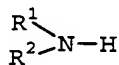
III

which are subsequently treated with a halogenating agent to
give 5,7-dihalogen-6-phenyl-triazolopyrimidines of formula IV



IV

in which Y is halogen, with an amine of formula V

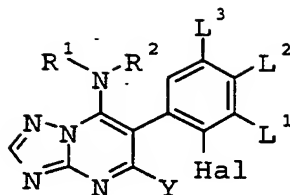


V

- in which R¹ and R² are as defined in formula I to produce com-
pounds of formula I.

7. A process for the preparation of compounds of formula I ac-
cording to claim 1 wherein X is cyano, C₁-C₁₀-alkoxy, or
C₁-C₁₀-haloalkyl, which comprises reacting 5-halogen-triazolo-
pyrimidine of formula I',

45



I' (X=Hal)

wherein Y is halogen, with compounds of formula VI,

M-X'

VI

which are, dependent from the value of X' to be introduced, an anorganic cyano salt, an alkoxylate, haloalkoxylate or an alkenyloxylate, resp., wherein M is ammonium-, tetraalkylammonium-, alkalimetal- or earth metal cation, to produce compounds of formula I.

8. Intermediates of formulae II, III, and IV as defined in claim 6.

9. A composition suitable for controlling phytopathogenic fungi, comprising a solid or liquid carrier and a compound of the formula I as claimed in claim 1.

10. A method for controlling phytopathogenic fungi, which comprises treating the fungi or the materials, plants, the soil or the seed to be protected against fungal attack with an effective amount of a compound of the formula I as claimed in claim 1.